

**Notice of Allowability**

Application No.

10/086,074

Examiner

Ngoc-Yen M. Nguyen

Applicant(s)

KUWABARA, TETSUO

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to March 14, 2005.
2. ☒ The allowed claim(s) is/are 24-29.
3. ☒ The drawings filed on 2/26/02 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Ngoc-Yen M. Nguyen  
Primary Examiner  
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### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Joseph Eng on June 10, 2005.

The application has been amended as follows:

In the specification: page 1, line 7, delete "calcium fluorite" and insert --calcium fluoride--; page 10, line 4, delete "BREIF" and insert --BRIEF--; page 17, line 5, delete "320" and insert --310--; page 18, last line, delete "302" and insert --304--.

In the claims:

Claim 24 (currently amended): A method of manufacturing a calcium fluoride crystal, said method comprising:

mixing a raw material of calcium fluoride and a scavenger at a predetermined proportion to obtain a first mixture;

~~fusing~~ refining the first mixture in a crucible to remove impurities ~~refine the raw material of calcium fluoride~~; and

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~~mixing the refined calcium fluoride and a scavenger at a predetermined proportion, to obtain a second mixture; and~~

fusing the second refined mixture in a crucible to cause growth of calcium fluoride crystal having a transition density in the crystal that is not greater than  $1 \times 10^5/\text{cm}^2$ , and a dispersion of transition density inside an effective portion of the crystal in a range of  $\pm 5 \times 10^4/\text{cm}^2$ ;

wherein said method includes a baking process before ~~fusing~~ refining the first mixture or a baking process after ~~fusing~~ refining the first mixture but before ~~formation~~ and fusing of the second refined mixture or both, wherein said baking process is carried out as a separate process ~~before~~ from the refining process and the growth ~~fusing~~ process, by using a porous baking crucible different from the refining crucible and the ~~fusing growth~~ crucible.

Claim 26 (currently amended): The method of manufacturing a calcium fluoride crystal according to claim 24, wherein ~~the first mixture contains~~ a scavenger of 0.0005 to 0.05 mol% is added to the fusing step.

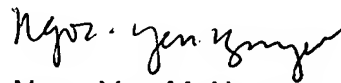
The following is an examiner's statement of reasons for allowance: the prior art does not teach or disclose a process for producing calcium fluoride which includes at least one baking step to remove moisture before or after the refining step.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc-Yen M. Nguyen whose telephone number is (571) 272-1356. The examiner is currently on Part time schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stan Silverman can be reached on (571) 272-1358. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed (571) 272-1700.

  
Ngoc-Yen M. Nguyen  
Primary Examiner  
Art Unit 1754

nmn  
June 10, 2005